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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,465	04/17/2001	Thomas Senn	031211-059	5999

21832 7590 06/14/2004

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EXAMINER

HARRISON, CHANTE E

ART UNIT	PAPER NUMBER
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2672

16

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/835,465

**Applicant(s)**

SENN ET AL.

**Examiner**

Chante Harrison

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-26 and 28-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. This action is responsive to communications: RCE, filed on 5/13/04.
2. Claims 1-6, 8-26 and 28-44 are pending in the case. Claims 1 and 21 are independent claims. Claims 1 and 21 have been amended. Claims 7 and 27 are canceled.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-38, 40-41 and 43-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Lindsay Holt et al, U.S. Patent 5,528,261, 6/1996.

As per independent claim 1, Holt discloses a process for producing an electronic color information file for color communication, wherein the file includes at least one data set describing the color impression of at least one color sample comprising making available one data set (Fig. 6; col. 4-5, ll. 66-2), coding said at least one data set into text (i.e. the color architecture is implemented in object oriented programming design

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using any one of multiple text based programming languages which code/represent the data for processing) (col. 4, ll. 65-67; col. 6, ll. 15-27), storing the data set in a preselected data format in the color information file in a text format (i.e. storing the encoded data in a file) (col.9, ll. 26-33; col. 6, ll. 10-20), all the information data associated with the color sample (col. 5, ll. 21-25) and one of identifying, characterizing, and supplementing the one color sample (col. 5, ll. 24-27) are stored as information containing data objects (col. 5, ll. 40-45) in an open, expandable, hierarchically organized object structure in the color file (abstract).

As per dependent claims 2 and 22, Holt discloses each data object is labeled with a characterizing type description selected from a group of predefined type descriptions (col. 6, ll. 33-38), the type description provides details on the structure and content of the data object (col. 6, ll. 33-48) and the data type description of the data object is stored in the color information file in defined relation to the information data of the data object (col. 6, ll. 33-50).

As per dependent claims 3 and 23, Holt discloses one data object includes one hierarchically subordinate data object (col. 6, ll. 33-45), each subordinate data object is labeled with a characterizing type description (col. 9, ll. 50-55) selected from a predefined group of type descriptions (col. 6, ll. 33-38), the type description provides details on the structure and content of the data object (col. 6, ll. 33-48) and the data

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type description of the data object is stored in the color information file in defined relation to the information data of the data object (col. 6, ll. 33-50).

As per dependent claims 4 and 24, Holt discloses a name is associated with one of the data object of the uppermost level of the hierarchy (col. 6, ll. 33-36) and the data objects respectively subordinate to a data object (col. 7, ll. 45-55), which name defines the respective data objects and is stored in the color information file in defined relation to the respective data objects (col. 6, ll. 33-55).

As per dependent claims 5 and 25, Holt discloses an explanatory description is associated with one of the data object of the uppermost level of the hierarchy (col. 6, ll. 33-36; col. 9, ll. 50-60) and the data objects respectively subordinate to a data object (col. 7, ll. 45-55), which explanatory description defines the respective data objects and is stored in the color information file in defined relation to the respective data objects (col. 6, ll. 33-55; col. 9, ll. 50-60).

As per dependent claims 6, 26 and 41, Holt discloses at least one data object includes a subordinate data object, which represents a connection pointer to another data object within or outside the color information file (col. 6, ll. 1-15).

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As per dependent claims 8 and 28, Holt discloses at least one data object includes a binary data object as information data, wherein this binary data object is stored in the color information file as symbols in MIME-compatible format (i.e. text representation) (col. 29-30).

As per dependent claims 9 and 29, Holt discloses the hierarchically organized object structure of the data objects is built on the basis of a page description (abstract).

As per dependent claims 10 and 30, Holt discloses the step of storing the information data which are associated with one color sample and one of identify, characterize, and complement the color sample is carried out by arbitrarily selecting from a predefined group of data object types (col. 5, ll. 15-18; col. 6, ll. 20-40).

As per dependent claim 11, Holt discloses the predefined group of data object types can be expanded with additional data object types (col. 14, ll. 40-65).

As per dependent claims 12 and 31, Holt discloses the predefined group of data object types includes at least data objects for spectral and calorimetric data (col. 11, ll. 40-60; Fig. 7).

As per dependent claims 13 and 32, Holt discloses the predefined group of data object types additionally includes data objects for further information data relevant for the visual impression of the color (col. 10, ll. 30-65).

As per dependent claims 14 and 33, Holt discloses the predefined group of data object types additionally includes data objects for ICC profiles (col. 10, ll. 30-65), measurement conditions (col. 14, ll. 25-40), light source data (col. 11, ll. 40-60) and device profiles (col. 11, ll. 65-67).

As per dependent claims 15 and 34, the predefined group of data object types additionally includes data objects for image data (col. 2, ll. 15-30).

As per dependent claim 16, Holt discloses the predefined group of data object types additionally includes at least one of data objects for image data (col. 12, ll. 32-35) and substrate describing data, wherein the image data preferably represent structure information such as surface condition (i.e. surface brightness as determined by spectral energy distribution) or graininess of the at least one color sample to be communicated (Fig. 7; col. 11, ll. 40-61)

As per dependent claim 17, Holt discloses the predefined group of data object types additionally includes data objects for supplementary data (col. 9, ll. 50-60) representable in text format (col. 7, ll. 45-55).

As per dependent claims 18 and 36, Holt discloses any combination of emission, remission and transmission spectra, and calorimetric data (i.e. dominant wavelength used to determine surface luminance) are stored in the color information file (col. 11, ll. 40-61; Fig. 7).

As per dependent claims 19 and 37, Holt discloses emission spectra and remission spectra of the one color sample are stored in the color information file (col. 11, ll. 40-60), such that the illumination light source can be taken into consideration by way of a color model for the visual representation of the one color sample on a screen (Fig. 4; col. 5, ll. 55-65).

As per dependent claims 20 and 38, Holt discloses an input profile and several output profiles assigned to a color sample and stored in the color information file (Fig. 1), and the input profile is used to recalculate a color sample from a device dependent color space into a device independent color space (col. 12-13, ll. 64-6), and the output profiles are used to recalculate the color location of the color sample from the device independent color space into a selected device dependent color space (col. 11, ll. 5-15) and to display the color location therein (Fig. 8).

As per independent claim 21, Holt discloses a process for communicating information relevant for visual color impression of a color sample comprising coding the information



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represented by the one of measured data and manually produced value data into text (col. 4, ll. 65-67; col. 6, ll. 15-27); storing the coded information at a transmitter end in a color information file in a text format (col. 9, ll. 26-33; col. 6, ll. 10-20), and transferring the color information file to a receiver by way of a communication medium (col. 4-5, ll. 64-2; Fig. 1), and displayed in visual form at the receiver end (col. 1, ll. 20-25), all the information data associated with the color sample (col. 5, ll. 20-25) and at least one of identifying, characterizing and supplementing the color sample (col. 5, ll. 24-27), being stored as information containing data objects (col. 5, ll. 40-45) in an open, expandable, hierarchically organized object structure in the color file (abstract).

As per dependent claim 35, Holt discloses the predefined group of data object types additionally includes at least one of data objects for image data and substrate describing data, whereby the image data preferably represent structure information of the at least one color sample to be communicated (col. 12, ll. 32-35).

As per dependent claims 40 and 43, Holt discloses the predefined group of data object types includes device dependent color data (col. 8, ll. 1-5).

As per dependent claim 44, Holt discloses structure information includes at least one of surface condition or graininess (col. 11, ll. 40-61; Fig. 7).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt et al. as applied to claims 1 and 21 above, and further in view of Maribeth Back et al., U.S. Patent 6,515,690, 2/2003.

As per dependent claims 39 and 42, Holt fails to disclose the hierarchically organized object structure of the data objects is built on the basis of Extensible Markup Language, which Back discloses (col. 6, ll. 38-47; col. 7, ll. 40-45).

Holt teaches a computer system communicating with peripheral devices in an object-oriented architecture, which receives input color data, accesses hierarchical files and transmits corresponding output data. Back teaches an object oriented system using XML (Extensible Markup Language) files to output desired display attributes stored in the files that correspond to system input. It would have been obvious to one of skill in the art to include Back's object structure built on the basis of Extensible Markup Language with the disclosure of Holt to improve indexing of a variety of stored data.

***Response to Arguments***

5. Applicant's arguments filed 5/13/04 have been fully considered but they are not persuasive.

Regarding claims 1 and 21, Applicant argues (pp. 9, Para 4 & pp. 10, Para 2) Holt et al. fail to suggest coding the data set into text and storing the data set...

In reply, Holt et al. disclose coding the data into text by implementing an object-oriented programming design which uses any of one of multiple text based programming languages to code/represent the color data to be processed (col. 5, ll. 65-67; col. 6, ll. 15-27). Holt et al. also disclose storing the data in header files as suggested by the Applicant's specification pp. 9, Para 1. Therefore the rejection in view of Holt et al. is maintained.

Applicant argues claims 2-6, 8-20, 22-26, 28-38, 40-41 and 43-44 are allowable in view of the arguments presented and based on their dependency from corresponding independent claim 1 or 21.

In reply, the rejection regarding the above-identified claims is maintained.

Regarding claims 39 and 42, Applicant argues Back et al. fail to disclose coding and storing the data set.

In reply, Back et al. was incorporated into the rejection of the above claims as a supplement for the lack of disclosure of the use of XML hierarchically organized object

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structures by Holt et al., for reasons as set forth in the above rejection of the claims and in the additional response to follow. Holt teaches a computer system communicating with peripheral devices in an object-oriented architecture, which receives input color data, accesses hierarchical files and transmits corresponding output data, and Back teaches an object oriented system using XML files to output desired display attributes stored in the files that correspond to system input. Additionally, it is obvious to incorporate Back's disclosure of XML with that of Holt because Holt teaches representing objects containing color data in many different forms with varying types of data format without changing the overall architecture (col. 6, ll. 23-27).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 703-305-3937. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison  
Examiner  
Art Unit 2672

ceh



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